

## Appendix E

### Legacy System To CDM Correlation

1. To provide continuity from current (legacy) data systems to the Command Data Model (CDM), it is helpful to see the correlation between the Legacy System Data Elements and the Command Data Elements.
2. It should be noted that the phrase "data element" has two different meanings here. As used in "Command Data Element," "data element" refers to basic, primitive, or generic data in a conceptual data model and is used to "build" answers to questions as they are asked by reports, applications, or ad-hoc queries. In "Legacy Data Element," (LDE) "data element" may refer to an answer to a question, result of algorithm, or a field in a report as they appear in applications, reports and/or physical databases.
3. Because of the disparity between the nature of these two types of data elements, there is very little one-to-one mapping or direct cross-referencing between the data elements of the two sources. "Correlation" is the best way to describe the relationship between a Legacy Data Element (LDE) and a Conceptual Data Element (CDE). A CDE represents a more fundamental data value, and the LDE may represent a value that relates to the value of one or more CDEs. That relationship may depend upon certain conditions, constraints, or selection criteria. Thus, the following tables correlate each LDE by Legacy System, to a CDE, which name is composed of a Data-Entity-Name plus a Data-Element-Name.

Each "correlation" is further described by a "DERIVATION" which seeks to set forth the nature of the relationship between the LDE and the CDE. What this says is "that the value of the LDE is DERIVED from the value of the related CDE by means of the indicated manner." The possible values of DERIVATION are:

a. "STRAIGHT" denotes that the meaning of one LDE corresponds to the meaning of one CDE. For example:  
PROJECT TITLE--PROJECT-NAME

b. "COMPOUND" denotes that the meaning of one LDE corresponds to the meanings of two or more CDEs linked together. For example:

EMPLOYEE NAME  
--EMPLOYEE-LAST-NAME  
--EMPLOYEE-FIRST-NAME  
--EMPLOYEE-MIDDLE-NAME

c. "CONDITIONAL" means that the value of the LDE correlates with a particular instance of a CDE depending on certain conditions or "values" which are represented by other CDEs. For example: PROJECT-MANAGER-PHONE relates to EMPLOYEE PHONE-NUMBER, but the relationship depends also upon WORK-ITEM-ASSIGNMENT-CODE, WORK-ITEM-CODE, and EMPLOYEE-IDENTIFIER.

(1) [NOTE for items 1,2 and 3 above:  
Where the integrity of the value of a LDE is clearly dependent upon a set of CDE's as the Primary Keys for the value of the related CDE, these Primary Key CDE's will not be

**EP 25-1-6**

11 Feb 91

listed. For example: to identify a value for a particular instance of WORK-ITEM-MILESTONE/ORIGINAL-DATE, there first must be a value for WORK-ITEM/CODE, MILESTONE-TABLE/CODE and MILESTONE-TABLE/STANDARD-LOCAL-TYPE. These latter conditional CDEs are not listed.]

d. "ROLL-UP" denotes that the meaning of the LDE represents a summation (total) of several instances of one CDE as selected by a particular set of criteria. The values of the selection criteria are recorded by other related CDEs.

e. "COMPUTED" denotes that the meaning of the LDE represents a meaning that

is calculated according to a specific algorithm (which may include select criteria, conditions, roll-ups and/or formulas) or a combination of algorithms.

4. The following are two listings of correlations:

a. Sorted by Legacy System and Data Elements (LDE) showing correlate Conceptual Entities and Data Elements (CDE).

b. Sorted by conceptual entities and data elements (CDE) showing correlated legacy systems and data elements (LDE).